

CLAIMS

1. Soda-lime-silicate glass composition, **characterized in that** it includes the optical absorbents below, in
5 contents varying within the following weight limits:

Fe₂O₃ (total iron) 0.01 to 0.15%

V₂O₅ (total vanadium) 0.11 to 0.40%

MnO (total manganese) 0.05 to 0.40%

and **in that** the glass has, for a thickness of 3 mm, an
10 ultraviolet transmission T_{UV}, measured between 295 and
380 nm, not exceeding 40% and chromatic coordinates
(a*, b*) under illuminant C of between -3 and +3.

2. Composition according to Claim 1, **characterized in that** the MnO content is not less than 0.10%, especially
15 0.13%.

3. Composition according to Claim 1 or 2,
characterized in that it contains cobalt oxide (CoO)
20 with a content not exceeding 0.0025%.

4. Composition according to one of the preceding
claims, **characterized in that** the V₂O₅ content is not
less than 0.16%, especially between 0.19 and 0.22%.

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5. Composition according to one of the preceding
claims, **characterized in that** the glass has, for a
thickness of 3 mm, an ultraviolet transmission not
exceeding 20%.

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6. Composition according to one of the preceding
claims, **characterized in that** the glass has, for a
thickness of 3 mm, a chromatic coordinate a* measured
under illuminant C of between -2 and 2, preferably
35 between -1 and 1.

7. Composition according to one of the preceding
claims, **characterized in that** the glass has, for a

thickness of 3 mm, a chromatic coordinate b* measured under illuminant C of between 0 and 3.

8. Composition according to one of the preceding
5 claims, characterized in that the glass has, for a thickness of 3 mm, a light transmission factor under illuminant C of not less than 70%, preferably not less than 80%.

10 9. Composition according to one of the preceding claims, characterized in that it includes the colouring agents below in contents varying within the following weight limits:

	Fe ₂ O ₃ (total iron)	0.02 to 0.08%
15	V ₂ O ₅ (total vanadium)	0.16 to 0.25%
	MnO (total manganese)	0.20 to 0.30%
	CoO	0 to 0.0020%.

10 10. Composition according to one of Claims 1 to 8,
20 characterized in that it includes the colouring agents below in contents varying within the following weight limits:

	Fe ₂ O ₃ (total iron)	0.02 to 0.08%
25	V ₂ O ₅ (total vanadium)	0.19 to 0.22%
	MnO (total manganese)	0.13 to 0.18%
	CoO	0 to 0.0010%.

11. Composition according to one of the preceding claims, characterized in that the redox state of the glass does not exceed 0.2, preferably does not exceed 0.1.

12. Composition according to one of the preceding claims, characterized in that it consists of a glass matrix comprising the following constituents (in percentages by weight):

SiO ₂	64-75%
Al ₂ O ₃	0-5%

	B ₂ O ₃	0-5%
	CaO	5-15%
	MgO	0-10%
	Na ₂ O	10-18%
5	K ₂ O	0-5%
	BaO	0-5%.

13. Process for manufacturing a glass having a composition according to Claim 1 and furthermore characterized by an MnO/V₂O₅ ratio of between 1.2 and 1.8, which includes a step of melting the batch mix in a melting furnace, the said batch mix providing all of the oxides in the said composition, and a step of forming the said glass in order to obtain hollowware or flat articles.

14. Process for manufacturing a glass having a composition according to Claim 1 and furthermore characterized by an MnO/V₂O₅ ratio of between 0.5 and 1.2, which includes a step of melting part of the batch mix, a step of transporting the molten glass to the forming device, during which step oxides are added to the said molten glass by means of glass frits or agglomerates, all of the vanadium and manganese oxides, or the manganese oxide alone, being added to the composition during this step, and a step of forming the said glass in order to obtain hollowware or flat articles.

30 15. Process according to the preceding claim, characterized in that the MnO/V₂O₅ ratio is between 0.8 and 1.2.

35 16. Glass hollowware formed by moulding, pressing or blowing, characterized in that its chemical composition and its optical properties are defined by any one of Claims 1 to 12.

17. Sheet of glass formed by floating on a bath of molten metal or by rolling, characterized in that its chemical composition and its optical properties are defined by any one of Claims 1 to 12.

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18. Use of manganese oxide in a glass containing vanadium oxide so as to increase the absorptivity of the said glass for ultraviolet radiation.